

REMARKS

This is in reply to the third Office Action dated 1 February 2005. By this Amendment new claim 25 has been added.

The Applicant appreciates the appointment of a new Examiner to examine this application, and the new Examiner's time in carefully reviewing the prosecution history of this application.

The application has had an unusual history in the USPTO. Claims 1 -15 of the application as originally filed were allowed by the first Examiner. The Applicant cancelled the remaining claims and paid the issue fee following receipt of a Notice of Allowance. The issue fee was timely paid on 14 October 2003. On 15 June 2004, the Applicant received an Office Action from a second Examiner, withdrawing the application from issuance and rejecting the previously allowed claims. Some of the rejections were based on newly cited 3M references which were not prior art as their publication date was after the filing date of the present application.

After several discussions with the Supervisory Patent Examiner (SPE) then assigned to the case, the Applicant filed an Amendment on 13 August 2004. In that Amendment, the Applicant amended some claims, added some new claims, and explained why the claims were patentable over the prior art that was cited.

On 1 February 2005, the second Examiner again rejected the claims. Applicant's attorneys then reviewed the PAIR database and discovered that a third party had submitted five letters and accompanying documents to the USPTO after this application was allowed and after the issue fee was paid (the "third party documents"). The third party documents were addressed to the first Examiner and the Supervisory Patent Examiner and are dated between 19 December 2003 and 26 February 2004. The third party documents also refer to undocumented telephone conversations between the first Examiner and the third party. Neither the USPTO nor the third party provided the Applicant with copies of any of the third party documents. Rather, the Applicant's attorneys independently discovered the third party documents by accessing the Office's PAIR database after receipt of the 1 February 2005

Office Action. The third party documents were collectively categorized on the PAIR database as a "Miscellaneous Incoming Letter" dated 2 March 2004.

The third party documents constituted an improper third party protest, inasmuch as they were submitted to the USPTO after the present application was published and allowed, and as neither the third party nor the USPTO provided the Applicant with a copy of the third party documents. (37 C.F.R. 1.291 and MPEP 1901) The USPTO instructs Examiners (including Supervisory Examiners) not to "accept oral or telephoned comments or submissions about published applications from third parties." (Deputy Commissioner Kunin's Notice of 26 March 2003, 'Third Party Attempts to Protest or Otherwise Oppose the Grant of a Published Application', published 22 April 2003 (1269 O.G. 179)). Nevertheless, the USPTO accepted the third party documents, withdrew this application from issue, and issued the 15 June 2004 Office Action, which was based on newly cited references that were derived from the improper third party protest. This Office Action was prepared by the second Examiner since the first Examiner had since left the Patent Office.

The Applicant brought the improper third party protest to the attention of the Group Director, and requested that this application be reviewed by a new Examiner without further participation from the SPE. The Group Director agreed. The Group Director also "closed out" the "Miscellaneous Incoming Letter" dated 2 March 2004 from the PAIR database so the third party documents are no longer publicly accessible. Notwithstanding this, the Applicant is making the third party documents of record in the enclosed Supplementary IDS in fulfillment of the Applicant's duty of candor.

The present application would have issued as a patent over one year ago but for the improper third party protest. The Applicant has been working patiently with the USPTO for more than one year to resolve the rejections that have stemmed from the improper protest. The new Examiner is therefore respectfully urged to reconsider the rejections made by the second Examiner and re-allow this application as soon possible, especially in view of prosecution history of this application, summarized above. The Applicant reiterates the submissions set forth in the Applicant's Amendment of 13 August 2004 that the subject matter of the Applicant's claims is patentably distinguishable from the prior art cited in the

second Office Action. It is submitted that the Applicant's claims are similarly distinguishable from the prior art cited in the 1 February 2005 Office Action for the reasons set forth below.

In the 1 February 2005 Office Action, the second Examiner has once again rejected claims 1, 2, 8-12, 14 and 16 – 18 under 35 U.S.C. 103(a) as being unpatentable over Cata-Groove: Snow Plow Resistant Thermoplastic Marking Material (July 1998) in view of Stowell et al. (US 5,215,402). Both the Cata-Groove and Stowell et al. references were listed in the Applicant's Information Disclosure Statement filed 19 June 2002 and were considered but not deemed to render the claims unpatentable by the first Examiner issuing the first allowance of this application.

The Cata-Groove process is described at page 2 of the Applicant's application where it is described as "a very time consuming procedure" that is "not well suited for forming complicated patterns or covering large surface areas". The Cata-Groove grooves are installed by sawing or grinding into the finished pavement surfaces. This is a very labor-intensive and slow process. Moreover, it is difficult to make very shallow grooves having precisely defined edges using a grinder. The Cata-Groove material is a granulated material packed into 55 pound bags or cardboard containers. (Cata-Groove, sections 2, 3.3, 3.3.1, 3.3.2, and 4.1). The material has no more of a predetermined pattern than sand poured into a bag or box. At the time of application, the Cata-Groove thermoplastic compound is poured into the grooves in a heated state (i.e. between 350 to 420 degrees F.) as explained at page 2, section 3.2.2 of this reference. Accordingly, the thermoplastic compound is molten and free-flowing at the time it is introduced into the grooves, and has no more of a predetermined pattern than water poured from a pitcher.

The Stowell et al. reference relates to a process patented by the Applicant for forming impressions in asphalt surfaces. This process is discussed at page 1 of the Applicant's application. The Stowell et al. process is designed to imprint asphalt to simulate the appearance of cobblestones or brick. After the template is removed and the asphalt is allowed to harden, a thin layer of cementitious coating may be applied to the imprinted asphalt surface to enhance the brick and mortar effect.

The 1 February 2005 Office Action asserts that the Cata-Groove discloses the steps set forth in subparagraphs (d), (e) and (f) of claim 1. Claim 1, subparagraph (d) includes the step of "providing a second template having a predetermined pattern at least partially matching the pattern of said first template." Since the Cata-Groove thermoplastic compound is poured into a groove in a molten state, it is clearly not a "second template having a predetermined pattern." On the contrary, it is amorphous and free-flowing and only takes the shape of the grooves that it is poured into *after* application. Cata-Groove, and the asserted combination, fails to disclose the claimed steps. Therefore, even if there were a motivation to combine the teachings of Cata-Groove and Stowell et al, the combined disclosure would not teach all of the steps of the Applicant's method as recited in claim 1. It is therefore submitted that claim 1 is allowable over the Cata-Groove and Stowell et al. references. Indeed, this was the conclusion originally reached by the Patent Office.

Moreover, there is no motivation to combine Stowell and Cata-Groove. The Stowell reference describes a technique for creating a simulated brick or cobblestone pattern in asphalt. Stowell advocates spreading a colored concrete slurry on the impressed asphalt surface to achieve a *brick and mortar or simulated cobblestone effect*. (Stowell, Col. 3, lines 56-67). The Cata-Groove material furthers its role as a pavement marking by taking on noticeable white or yellow colors (Cata-Groove, section 2.1). Such pavement marking colors are selected for their obvious and conspicuous nature and generally are not suitable for simulating cobblestone or brick and mortar. Accordingly, Applicant respectfully submits that there is no motivation to combine the Stowell and Cata-Groove references.

The second Examiner contends at page 17 of the Office Action that color choices are irrelevant to the claim at issue and are "tangential to the motivation to combine". The Applicant respectfully disagrees. The fact that the Cata-Groove material takes on conspicuous colors supports the conclusion that it is adapted for an entirely different purpose than the Stowell invention. The second Examiner has failed to articulate any plausible reason why a person skilled in the art would be motivated to combine the teachings of Cata-Groove and Stowell in the manner contemplated. The Examiner notes that Stowell states in column 1, lines 15 - 62 that prior art methods and apparatus for imprinting surface patterns "are known but have disadvantages". It is submitted that this statement does not form the basis for a motivation to combine Stowell with Cata-Groove. Moreover, even if Stowell and Cata-

Groove are combined, they do not teach subject matter within the scope of Applicant's claims.

The second Examiner contends at page 7 of the Office Action that Cata-Groove teaches a second template that can be considered to be pre-formed in a predetermined pattern "since it is pre-formed by mixing the components of the material before application, and the pattern has already been predetermined by the lines that were ground into the surface". Similarly, at page 17, the 1 February 2005 Office Action states:

The grooves in Cata-Groove are grinded in a predetermined pattern, so that when the material is poured into the grooves, it fits that predetermined pattern. The material is not simply poured haphazardly, but is poured into the preformed pattern.

As explained above, Applicant's claim 1 includes the step of "providing a second template having a predetermined pattern". Claim 6 provides that the second template "is formed into a thermoplastic grid prior to inserting said second template into said impression". Claim 15 provides that the second template comprises "a grid pre-formed from a plurality of frame elements prior to inserting said second template into said impression". Claim 20 includes the step of "providing a thermoplastic second template pre-formed in a predetermined pattern" and the subsequent step of "inserting said second template pre-formed in said predetermined pattern into said impression". New claim 25 includes the step of "inserting said second template previously pre-formed in said predetermined pattern into said impression". It is submitted that Cata-Groove does not disclose a second template nor does it disclose a template that is preformed *prior to insertion into the impression*. As explained above, it does not follow that since grooves are "grinded in a predetermined pattern" material that is subsequently poured into such grooves is preformed in that predetermined pattern. That would be tantamount to saying that water is pre-formed in the shape of ice cubes even *before* it is poured into ice cube trays and frozen. This is obviously incorrect. It is submitted that in the present case the second Examiner overlooked the foregoing limitations recited in Applicant's claims. The Applicant is claiming not just that the second template is pre-formed but also that the second template is provided in the predetermined pattern prior to its insertion into the impression formed by the first template.

The second Examiner has rejected claims 3 – 5 and 19 under 35 U.S.C. 103(a) as being unpatentable over Cata-Groove and Stowell et al. (US 5,215,402) and further in view of Hughes (European Patent Application EP 0 898 018). Hughes is listed on the Applicant's supplementary Information Disclosure Statement filed 13 August 2004. The second Examiner contends that Hughes teaches using a portable heater to fix the template in position "since Hughes states in column 2, lines 2 – 5 that locally applied heat after laying of the pattern allows the pattern to be imprinted". Hughes relates to imprinting synthetic asphalt and to the imprinting of such a material to produce a patterned road surfacing. In the embodiment referred to by the Examiner, the material may be allowed to cool and is later softened by locally applied heat so as to allow the pattern to be imprinted. Hughes does not teach the use of heat to fix a template inlaid in a substrate in position. Rather, Hughes relates only to heating the substrate itself so that it may be imprinted. Moreover, Hughes does not describe how heat may be locally applied to the substrate. It is therefore submitted that Hughes does not teach or suggest the step of fixing the second template in position by heating the second template after insertion of the second template into the impression "to cause said second template to bond to said asphalt surface" (claim 3) or "passing a portable surface heater over an upper surface of said second template after said second template has been inserted in said impression" (claim 19). Similarly, Hughes does not teach heating a second template to fix it in position as also recited in claims 20 and 25. Accordingly, even if there were motivation to form a Cata-Groove-Stowell-Hughes combination, the combination would not meet the limitations of claims 3-5 or 19.

The second Examiner also rejected claims 1, 2, 6-13, 15 and 16 pursuant to 35 U.S.C. 103(a) as unpatentable over the combination of Caven et al. (US 5,857,453) or Eigenmann (US 4,685,824) in view of Stowell et al. On page 17 of the Office Action the second Examiner refers to "3M Guidelines for Pavement Marking Applications in Grooved Pavement Surfaces: Information Folder 5.18 Grooving Applications". The second Examiner contends that such Information Folder refers to a Tech Memo purportedly dated March 2000, but the second Examiner has been unable to produce such a Memo. The 3M documents are therefore not prior art in respect of this application. In light of this, the second Examiner has cited the Caven et al. patent which refers to the 3M Stamark™ technology. The documents referred to in the Applicant's Supplementary IDS submitted herewith also refer to the

Stamark™ technology. The second Examiner has also cited the Eigenmann reference which teaches a similar technology of applying tape into grooves in pavement.

As submitted in Applicant's Amendment of 13 August 2004, the Stamark™ technology referred to in Caven is adapted for an entirely different purpose than the second template of Applicant's invention. Caven relates to a precision slot cutting machine for concrete and asphalt. Caven also teaches installation of recessed pavement marking tape into such slots. In the Background portion of Caven reference is made to Stamark™ marking tape manufactured by 3M (column 1, lines 24 – 28) which may be adhesively applied into the grooves (column 1, lines 44 – 49). The purpose of the Stamark™ tape as described in Caven is as an improved road pavement marker to replace traditional painted pavement stripes. The Stamark™ tape may be recessed in grooves cut by the blades of a slot cutting machine to avoid scrapage by snowplows when used in northern climates. The Eigenmann reference similarly discloses a prefabricated road marking tape insertable into a groove provided in a road surface for resisting snow plowing implements.

It is submitted that there is no teaching in Caven or Eigenmann of a second template "having a predetermined pattern at least partially matching the pattern of said first template" as recited in Applicant's claim 1. In other words, there is no description that the tape of Caven or Eigenmann is anything more than simply adhesive tape provided on a tape roll. It is submitted that there is no "predetermined pattern" as contemplated by Applicant's invention and there is no "first template" to which the tape is matched. Therefore, no combination of Caven, Eigenmann, and Stowell includes the recited claim elements.

Further, it is submitted that there is no motivation to combine Caven and Eigenmann with Stowell as asserted by the Examiner. As explained above, Stowell describes a process for imprinting asphalt for simulating the aesthetically pleasing features of paving stones or cobblestones for decorative purposes. In particular, Stowell discloses spreading a colored concrete slurry on the impressed asphalt surface to achieve *a brick and mortar or simulated cobblestone effect*. (Stowell, Col. 3, lines 56-67). There is no suggestion in Stowell that any advantage would be achieved by inserting tape as taught by Caven or Eigenmann in the simulated grout lines (i.e. the impressions) formed between simulated stones or bricks. Stowell is not concerned with making the simulated cobblestones or paving stones surface

visible at night or preventing damage to the imprinted surface caused by snowplows. As submitted in Applicant's Amendment filed 13 August 2004, 3M Stamark™ tape and pre-cut symbols form large road markings (e.g., 'RR' and a large 'X' for a railroad crossing) that look nothing at all like cobblestones or brick and mortar. Instead, the tape and the pre-cut symbols shown in the 3M documents form broad stripes, arrows, and letters. The Applicant respectfully submits that one would not be motivated to insert arrows, letters, or broad stripes into an impression to achieve a brick and mortar or cobblestone appearance.

Moreover, there is no suggestion in Caven or Eigenmann that there would be any advantage in using an asphalt imprinting process as taught by Stowell. As indicated above, Caven relates to a slot cutting machine which is described as being more precise and reliable than traditional slot cutters. There is no suggestion that an entirely different method not employing a bladed apparatus to cut slots could be substituted. Similarly, Eigenmann does not disclose that any advantage would be gained by grooving pavement using a compressible template as taught by Stowell.

The Examiner notes that Stowell states in column 1, lines 15 – 62 that prior art methods and apparatus for imprinting surface patterns "are known but have disadvantages". It is submitted that this statement does not form the basis for a motivation to combine Stowell with Caven or Eigenmann. There is no suggestion in Caven or Eigenmann that using alternative pavement grooving processes would be necessary or desirable.

In the absence of motivation, references cannot be combined. In *In re Fritch*, 972 F.2d 1260, 1265-66 (Fed. Cir. 1992), the Court of the Appeals for the Federal Circuit stated:

'Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings or references can be combined only if there is some suggestion or incentive to do so'. Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious 'modification' of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

The second Examiner has rejected claims 3 – 5 and 19 under 35 U.S.C. 103(a) as being unpatentable over Caven et al. or Eigenmann and Stowell et al. and further in view of Hughes. The Hughes reference is described above. Hughes does not teach the use of heat to fix a template inlaid in a substrate in position. Indeed, Hughes does not include an inlaying step whatsoever. Rather, Hughes relates only to heating the substrate itself so that it may be imprinted.

Further, claims 3 – 5 and 19 specify that heating of the second template occurs *after* it is inserted into the impression to fix it in place by causing the second template to bond to the asphalt surface. The cited references do not teach the step of heating a thermoplastic template to fix the template in place *after* it has been placed in a first impression. Rather, the Cata-Groove thermoplastic material is heated to a molten, liquid state *before* it is poured into a groove, while the 3M pavement markings are secured with adhesives and are not heated.

The other dependent claims depend from allowable base claims as submitted above and are also allowable. Further, it is submitted that the dependent claims specify additional features neither taught nor suggested by the cited references, alone or in combination. Regarding claim 6, the second Examiner asserts that Caven and Eigenmann disclose a thermoplastic grid formed prior to insertion into the impression “since it is pre-formed and pre-shaped prior to insertion in the impression”. It is submitted that Caven and Eigenmann relate to prefabricated roadway tape and do not disclose pre-formed thermoplastic grids having predetermined patterns at least partially matching the pattern of a first template. Regarding claim 7, the second Examiner asserts that the tape of Caven or Eigenmann is of unitary construction “since each piece of tape is a unitary piece”. It is submitted that a thermoplastic grid formed from multiple elements or pieces is clearly not of unitary construction. Similarly, regarding claim 15, it is submitted that Caven and Eigenmann do not teach a second template comprising a grid pre-formed from a plurality of frame elements prior to inserting said second template into said impression. The second Examiner alleges that “the desired size and shape for the application is known”, but it does not follow that roadway tape is pre-formed in the desired shape and pattern prior to insertion of the tape into the grooves formed in the roadway. Regarding claims 17 and 18, the second Examiner concedes that the combination of Caven or Eigenmann and Stowell fails to disclose the predetermined pattern as being decorative or non-linear. It is submitted that Walker (US

2,898,825) similarly discloses a method of applying stripes of tape on paved surfaces for the purpose of marking off lanes or for other functional purposes. Walker describes continuously applying adhesive tape to a substrate using a taping apparatus. As will be readily appreciated by a person skilled in the art, complicated non-linear and/or decorative patterns could not be achieved using the apparatus of Walker in a continuous process. While Walker does state that many variations in the structure of the tape applying apparatus are possible, there is no teaching or suggestion that non-linear and/or decorative patterns could possibly be achieved.

New claim 25 specifically provides that the second template "previously pre-formed in said predetermined pattern" is inserted in the impression formed by the first template and then the second template is fixed in position "within said impression to form said inlaid pattern by passing a portable heater over the surface of said second template". As submitted above, none of the prior art, alone or combination, disclose the combination of features recited in claim 25.

In summary, it is submitted that the Applicant's current claims are patentable over the cited references. Accordingly, the Applicant respectfully requests withdrawal of the rejections and re-allowance of this application as soon as possible, especially in view of the prosecution history of this application summarized above. The Applicant requests that the previously submitted issue fee be applied for this purpose.

If the Examiner has any questions about this paper or is not convinced that the claims are in condition for allowance, Applicant requests a personal interview at the earliest possible time.

Respectfully submitted,

By:



Thomas W. Bailey
Registration No. 36,411
tel: 604.669.3432
fax: 604.681.4081
e-mail: tbailey@patentable.com

Vancouver, B.C.
CANADA

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.